ABSTRACT OF THE DISCLOSURE

A semiconductor device has thin film resistors connected in series to form a bleeder resistance circuit. Each of the thin film resistors is made of a polysilicon film doped with B or BF_2 P-type impurities and has two end portions each having a high impurity concentration region. A first insulating film overlies the thin film resistors. First conductors are connected to the ends of the thin film resistors for connecting the thin film resistors in series. The semiconductor device has second conductors each connected to a respective one of the first conductors and overlying a respective one of the thin film resistors through the first insulating film.